



August 17, 2011

ECOWATER SYSTEMS LLC
MARGARET BICKING
1890 WOODLANE DR
WOODBURY MN 55125

SEARS BRANDS MANAGEMENT
CORPORATION
MARGARET BICKING
1890 WOODLANE DRIVE
WOODBURY MN 55125

Re: Description: WATER TREATMENT DEVICE - POE SOFTENER
Manufacturer: SEARS BRANDS MANAGEMENT CORPORATION
Product Name: KENMORE ELITE HYBRID WATER SOFTENER
Model Number(s): 625.385200
Product File No: 20110227

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters Comm 82 through 84, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of August 2016.

This approval is contingent upon compliance with the following stipulation(s):

- This product has undergone sufficient testing to document the product's ability to reduce only those contaminants and/or substances as specified in this approval letter when the product is installed and maintained in strict accordance with the manufacturer's published instructions.
- Where the Department of Natural Resources (DNR) has jurisdiction, a written approval may be required prior to installation of this product in a water supply system to reduce the concentration of a contaminant that exceeds the primary drinking water standards contained in ch. NR 809, Wis. Admin. Code, the enforcement standards contained in ch. NR 140, Wis. Admin. Code, or for a water supply system that is subject to a written advisory opinion by the DNR. For more information contact the DNR Section of Private Water Systems, P.O. Box 7921, Madison, WI 53707, telephone (608) 267-9787.
- If this approved device is modified or additional assertions of function or performance are made, then this approval shall be considered null and void, unless the change is submitted to the department for review and the approval is reaffirmed.
- These cation exchange water softeners shall be sized, installed, programmed and maintained such that wastewater volumes, total dissolved solids and chloride discharges are minimized.
- This device contains a media, activated carbon (AC), with a finite capacity. This means the AC cannot be regenerated as the cation exchange resin can, so when the AC's capacity is exhausted it must be replaced. How long the AC component of this system lasts is primarily dependent on:
 1. the influent concentrations of free chlorine and aesthetic, organic, taste and odor causing compounds (e.g. geosmin, methylisoborneol); and
 2. water use.

- At the time of installation, these devices shall be provided with an effective means to warn the users when they are not performing their function. This shall be accomplished by one of the following:
 1. sounding and alarm or flashing a light, each connected to an acceptable power source;
 2. providing a sampling kit for analysis of hardness or other appropriate contaminants; or
 3. providing a hardness monitor.
- Operation of these devices at flow rates above the rated service flow rates specified within this approval letter are not supported or acknowledged by this approval. The rated service flow rates are the flow rates at which these devices were tested.

Because the level of treatment obtained is, in part, a function of how long the water is in contact with the treatment media within these devices, arbitrary increases in the flow rates above the rated service flow rates may compromise the quality of the treated water.

Based on testing data submitted to and reviewed by the department, this approval recognizes that this plumbing product will reduce the concentration of contaminants as specified on pages 1 through 3 of this letter.

WATER SOFTENING CAPABILITIES
PRODUCT FILE NUMBER 20110227
TABLE 1 OF 2

Model Numbers	Capacity*						Max. Rated Service Flow
Metered	Rating 1		Rating 2		Rating 3		
Kenmore	Grains	Pounds	Grains	Pounds	Grains	Pounds	gpm @ psig
625.385200	11,000	2.6	24,700	7.8	31,100	13.4	8 @ 6.5

Softener capacity ratings are based on grains of hardness, due to calcium and magnesium cations, removed (as calcium carbonate) while producing soft water between successive regenerations and are related to the pounds of salt required for each regeneration. The tests run to generate the hardness reduction data for table 1 of 2 were conducted in accordance with NSF Standard 44. Studies conducted on sulfonated poly-styrene di-vinyl benzene (SSDVBC) cation exchange media have documented that if hardness is reduced to less than 1.0 grain per gallon (17.1 mg/l), then barium and radium will also be effectively reduced. Thus, the capacity of these device for reducing barium and/or radium are based on the hardness reduction capacity ratings displayed above. This device is efficiency rated (ER) at the lowest salt dosages displayed for each model (i.e. "Rating 1").

AESTHETIC CONTAMINANT REDUCTION CAPABILITIES
PRODUCT FILE NUMBER 20110227
TABLE 2 OF 2

Flow Rate: 8.0 gallons per minute (gpm)
Capacity: 570,000 gallons (gals.)

Tested Contaminant	Influent Challenge (mg/l) ¹
Chlorine (free)	2.0 ± 10%

Other Conditions: the contaminant reduction performance capabilities displayed for Table 2 of 2 were verified by testing conducted in accordance with NSF *International* Standard 42. . To qualify for free chlorine reduction, the device must reduce the influent challenge concentrations by ≥ 50%; meeting the free chlorine reduction requirements also qualifies the device for the reduction of aesthetic, organic, taste and odor reduction (e.g. geosmin, methylisoborneol); this does not include hydrogen sulfide.

¹ = milligrams per liter (mg/l) are equivalent to parts per million (ppm)
± = plus or minus

≥ = greater than or equal to

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This device was tested under controlled laboratory, or field, conditions. The actual performance of this device for a specific end use installation will vary from the tested conditions based on local factors such as water pressure, water temperature and water chemistry.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter
Engineering Consultant-Plumbing Product Reviewer
Bureau of Integrated Services
Safety and Buildings Division
Department of Safety and Professional Services
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GWS:gws